



NATIONAL
EAGLE
LINE

CHIEF SCIENTIST LOG
1c

PRI - FLORIDA
QUEEN
680227-0323 #68001
PR2 - ATLANTIC
TWIN
690116-26-?? #69001

4

TRIDENT
680325-30 #68002

THREE SUBJECT NOTEBOOK

120 SHEETS WIDE WITH MARGIN

NAME _____

NO. 37-052

104353

March 25

Trident left San Juan about 0800 and steamed NNW for about 8 hours to the middle of the Puerto Rico Trench.

On station at 1600. Made a hydro-cast to 5050 m. for John Martin - for trace element analysis. Then about 2000 made a surface plankton haul for about 1 hr., also for John. Finally, about 2200, put out an underwater light and tried to catch an eel for Howard Umin (not present). Caught only a few small fish feeding in the plankton.

Go to bed around midnight.

March 26

Up 0730 - making deep (5050m) hydrocasts until about 0930 - Jerry Miller's work. Started rigging the Isaacs-Kidd midwater trawl about 1000, had it ready by 1400. Launched it OK, sent it down to around 2000m (7000m wire out), and had it back aboard at 2300. Was a very poor haul - a half dozen deep-sea fish and some small crustacea - one large red prawn. I kept a small hatchet fish.

March 27

Made two hydro-casts in the Puerto Rico Trench about 60 miles north of Mona Passage. Then made a series of plankton net tows from surface to about 300m. for John Martin. around 2100 started run for first Mona Passage geology station. Scheduled arrival about 0400 tomorrow.

ATTW

Dredge position

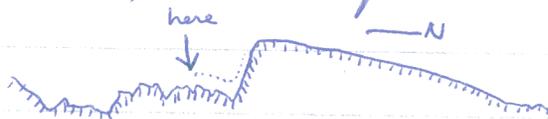
18° 27.1 N

67° 48.0 W

March 28

Arrived on station 0400. Ted, Art and I got up. From 0400 - 0500 all unnecessary blowers & motors were turned off, engines shut down, and the sonar turned on to listen for whales. Sape of this for Paul Perkins.

at 0500 started running fathometer tracks about the point north of Mona & east of Descheds where we would dredge. Found the rugged topography of expected fault zone, and found an excellent spot to dredge. The chain



bag dredge (~250 lbs)

was rigged

with a double weak link as below:



Water depth about 580m.

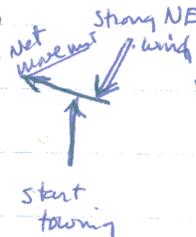
Put the dredge on

bottom, then pulled ahead slowly while paying out

a total of 1950 m of wire. Had a few snags, up to 4,000#

Then set brake & dragged dredge for about 10 minutes, at which time it hung up tight & rang up about 6,000#

Meanwhile, since no depth change, Capt. Collinsin turning about 20° right into wind; it appearing that we were being forced along the contours (sketch). This caused the first difficulty was much as the Capt. thought Harvey the winchman was not pulling in fast enough and that the boat was going to overrun the wire. Capt



yelled at Harvey to go faster, Harvey did, and the dynamometer moved up past 7,000#. However, apparently nothing broke, we slowed the winch down shortly, and resumed a rather slow (20 m/min) recovery. After a few sharp tugs up to around 6,000, we settled to a more or less steady fluctuation between 4,500-5,500. When only around 1,000 m left out, the Ch. Engineer (John Symonds) came on deck and told Harvey to speed it up, that the spool below was set to slip before anything would break. Although both Harvey and I knew from the way it had been handling that this was not so, the winch was speeded up, the dynamometer reading immediately went up to about 7,500, and with a snap, the weak link broke. Meter reading dropped right back to 1500#, rate of recovery went to 60 m/min and when the wire came in, no dredge was there.

The upper weak link had broken, but the lower one had not - ^{at} the shackle point, the chain mesh itself had broken - so the dredge was lost.

Capt. offered to break out the other dredge, but I refused because Bonnie's cruise begins in 2 weeks and if I lost the second dredge, she'd be in bad shape.

As Harvey said later - "If they'd left us alone, we would have landed a bag full of rocks." Thus ends the field season in Mona Passage.

At 1100 ran down to John Martin's station south of Cabo Rojo where began hydrocasts at 1930, Did a surface plankton tow.

March 29

Made deep plankton tow from about 0800 to 1200. Recovered net and started for south end of Mona Passage transect about 1300. Began transect to north at 1600. Stathometer trace, magnetometer record, BT every hour - through Mona Passage east of Descartes Island. Ended the run at 0130 March 30 in Puerto Rico Trench, north of the passage.

ATTW

March 30

Into Mayaguez about 1000. Tied up at same old spot Fla. Queen used.

Drove down to La Parguera in afternoon and saw Phosphorescent Bay.

March 31

Sailed out of Mayaguez 1400. Set course to north.

April 1

Underway all day

April 2

Underway all day

April 3

U/W a.d.

April 4

Arrived St. Landersdale dock 0830.

Dept. Miami airport 1350, arrived Corpus Christi 2000.